

Work Order ID 139600-2

Monday, November 30, 2015 11:08:34 AM

Split

139600

Page 1

Item ID: D4148-041

Revision ID:

Item Name: Fwd Crosstube Lug Assembly

Start Date: 11/30/2015 Start Qty: 4.00

Required Date: 11/30/2015 Req'd Qty: 4.00

Reference:

Accept

N9000040100

Setup Start *NS1*

Stop *NS2*

Cust Item ID:

Customer:

2
4
4

Approvals:

Process Plan: *MLJ*

Date: *DEC 03 2015* Tooling:

QC:

Date:

SPC (Y/N):

Date:

Run Start *NR1*

Stop *NR2*

Sequence ID/
Work Center ID

Operation
Description

Set Up/
Run Hours

Tool ID

Tool #

Plan
Code

Accept
Qty

Reject
Qty

Reject
Number

Insp.
Stamp

Draw Nbr

Revision Nbr

D4148

E

100

100

Small Fab

Small Fab

Memo

1- Assemble as per dwg

0.00

0.02

Pick kit

IAN 26 2016

*DAS
6
9-89*

110

110

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

0.00

2x
@

16/02/02
*DAS
36
9-89*

120

120

Packaging

Packaging

Identify as per dwg & Stock Location: *SK39*

Memo

0.00

0.00

2

FEB 02 2016

*DAS
6
9-89*

Work Order ID 139600

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139600

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Item ID: D4148-041

Accept

N900040100Setup Start ***NS1***

Revision ID:

Item Name: Fwd Crosstube Lug Assembly

Stop ***NS2***

Start Date: 11/30/2015 Start Qty: 4.00

4

Cust Item ID:

Required Date: 11/30/2015 Req'd Qty: 4.00

4

Customer:

Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Start ***NR1***
Stop ***NR2***Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
---------	--------	-----------	------------	------------	---------------	-------------

130

QC21- Final Inspection - Work Order Release

0.00

130

QC

Memo

0.01

Quality Control

MCS

FEB 02 2016

MCS

FEB 02 2016

Picklist Print

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Work Order ID: 139600

139600

Parent Item: D4148-041

D4148-041

Parent Item Name: Fwd Crosstube Lug Assembly

Start Date: 11/30/2015

Required Date: 11/30/2015

Start Qty: 4.00

Required Qty: 4.00

Comments: IPP Rev:A 10.06.24 new issue DD verf:EC
 IPP Rev:B 10.07.22 as per revB DD verf:JLM IPP Rev:C
 10.10.29 as per revC DD verf:EC IPP REV:D 11.03.02
 AS PER DWG REV.D DD VERF:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MS21043-3		Purchased	No			100	Each	910.0000	4	8			

MS21043-3

Nut

★★

Location	Loc Qty	Loc Code
FG	80	
103691	80	
FP001	11	
m130673	11	
GA	137	
m130673	15	
m131677	122	
ST302	524	
m133031	124	
m133577	400	
ST304	121	
m131340	121	
ST308	37	
m132551	37	

JAN 26 2016

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Work Order ID: 139600

Parent Item: D4148-041

Parent Item Name: Fwd Crosstube Lug Assembly

139600

D4148-041

Start Date: 11/30/2015

Required Date: 11/30/2015

Start Qty: 4.00

Required Qty: 4.00

MS21043-4

Purchased

No

100

Each

676.0000

1

12

MS21043-4

Nut

DAS

6

2-85

Location

Loc Qty

Loc Code

CCK004

274

m133316

274

CCK007

300

m132803

300

FG

40

104603

40

GA

61

m128798

61

ST302

1

m133134

1

D2690-6

Manufactured

No

100

Each

43.0000

1

4

D2690-6

Lanyard

DAS

6

2-85

Location

Loc Qty

Loc Code

ST009

28

137308

1

137431

27

ST012a

15

139060

15

D3910-1

Manufactured

No

100

Each

36.0000

1

4

D3910-1

Crosstube Lug

DAS

6

2-85

Location

Loc Qty

Loc Code

ST523

36

136920

36

JAN 26 2016

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Work Order ID: 139600

139600

Parent Item: D4148-041

D4148-041

Parent Item Name: Fwd Crosstube Lug Assembly

Start Date: 11/30/2015

Required Date: 11/30/2015

Start Qty: 4.00

Required Qty: 4.00

D4091-1 Manufactured No 100 Each 17.0000 1 4
D4091-1 ** 137035
 Mounting Lug

Location	Loc Qty	Loc Code
ST525	17	
133927	17	

D4148-1 Manufactured No 100 Each 0.0000 2 8
D4148-1 ** 137767x5
 Crosstube Lug Plate, Fwd

D4148-3 Manufactured No 100 Each 0.0000 1 4
D4148-3 ** 139651
 Stud Receiver, Lower

D4148-5 Manufactured No 100 Each 0.0000 1 4
D4148-5 ** 139038
 Eyebolt Stud

AN3C12A Purchased No 100 Each 84.0000 2 8
AN3C12A ** 133790
 Bolt

Location	Loc Qty	Loc Code
GA	71	
M128727	71	
ST349	13	
M128727	13	

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Page 4

Work Order ID: 139600

139600

Parent Item: D4148-041

D4148-041

Parent Item Name: Fwd Crosstube Lug Assembly

Start Date: 11/30/2015

Required Date: 11/30/2015

Start Qty: 4.00

Required Qty: 4.00

AN4C13A

Purchased

No

100

Each

133.0000

3

12

DAS

6

9-89

AN4C13A

BOLT

**

133790

Location

Loc Qty

Loc Code

GA

4

m132767

4

ST312A

60

m133483

60

ST344

69

m133577

69

MS17984-C413

Purchased

No

100

Each

56.0000

1

4

DAS

6

9-89

MS17984-C413

Quick Release Pin

**

133183

Location

Loc Qty

Loc Code

CCK004

30

m133577

10

m133686

20

ST315

26

m133316

6

m133483

20

MS20615-4M18

Purchased

No

100

Each

212.0000

8

32

DAS

6

9-89

MS20615-4M18

Rivet

**

Location

Loc Qty

Loc Code

GA

162

m123810

162

ST306

50

m133577

50

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32

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Work Order ID: 139600

139600

Parent Item: D4148-041

D4148-041

Parent Item Name: Fwd Crosstube Lug Assembly

Start Date: 11/30/2015

Required Date: 11/30/2015

Start Qty: 4.00

Required Qty: 4.00

NAS1149C0332R

Purchased

No

100

Each

3,692.000

4

16

NAS1149C0332R

WASHER

**

DAS
6
8-89

Location

Loc Qty

Loc Code

FP001

1004

m132930

1004

FP01

251

m133284

251

GA

427

m133284

427

ST271

2010

m133284

2010

16

NAS1149C0432R

Purchased

No

100

Each

1,085.000

6

24

NAS1149C0432R

WASHER

**

DAS
6
2-89

JAN 20 2016

Location

Loc Qty

Loc Code

GA

498

m125807

428

m131467

70

ST266

587

m131467

87

m133577

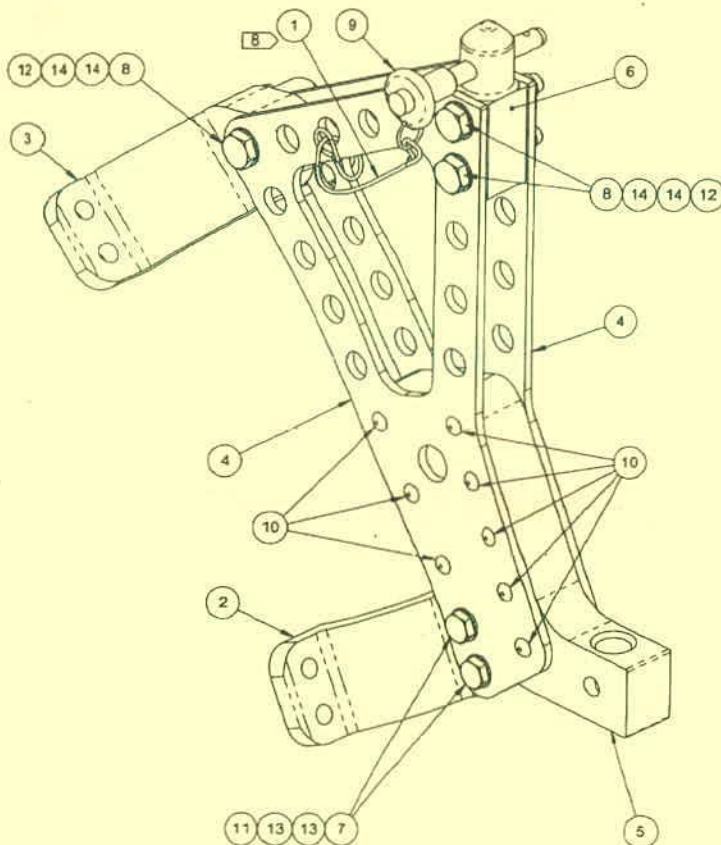
500

29

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Shop Packet Print

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D4148-041 FWD X-TUBE LUG ASSY

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D4148-041" PER DART QSI 044 6.1
- 7) WEIGHT: 3.66 lbs
- 8) ATTACH D2690-6 TO D4148-1 BY LOOPING AROUND A LIGHTENING HOLE FIRST AND THEN SECURE TO MS17984-C413

REWORK COPY
RETURN TO
ENGINEERING
CONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

1396006 MJS
1512-03

ITEM	QTY -041	P/N	DESCRIPTION
	X	D4148-041	FWD X-TUBE LUG ASSY
1	1	D2690-6	LANYARD
2	1	D3910-1	X-TUBE LUG
3	1	D4091-1	MOUNTING LUG
4	2	D4148-1	FWD X-TUBE LUG PLATE
5	1	D4148-3	STUD RECEIVER LOWER
6	1	D4148-5	EYEBOLT STUD
7	2	AN3C12A	BOLT
8	3	AN4C13A	BOLT
9	1	MS17984-C413	PIN, QUICK RELEASE
10	8	MS20615-4M18	RIVET, SOLID, PAN-HEAD
11	2	MS21043C3	NUT, SELF-LOCKING
12	3	MS21043C4	NUT, SELF-LOCKING
13	4	NAS1149C0332R	WASHER
14	6	NAS1149C0432R	WASHER

RELEASED
2013-08-16
MP

E	B6-4 Ø0.256 HOLE ADDED FOR CARGO TUBE INSTALLATIONS	AJS	13.07.22
D	HOLE DIA CHANGED TO 0.252" (D6-3); HOLE DIA CHANGED TO 0.250" (C8-5); REPLACED QTY(2) AN3C12A, MS21043C3 AND QTY(4) NAS1149C0332R WITH QTY(2) AN4C13A, MS21043C4 AND QTY(4) NAS1149C0432R (D3-1, C4-2)	SC	11.02.22
C	REDESIGNED D4148-1/3 TO ADDRESS COMPATIBILITY ISSUES WITH D350-591 SHORT STEPS	MB	10.10.12
B	REPLACED QTY(3) MS20615-4M18 WITH QTY(2) EACH AN3C12A, MS21043-3 AND QTY(4) NAS1149C0332R WASHER (ZN D3-1, B7-2 & B4-2); MS20615-4M18 WAS MS20615-4M20 (ZN D3-1 & B7-2); Ø0.191 Z PL REPLACES Ø0.129 3 PL (ZN D6-3); Ø0.129 7 PL WAS 10 PL (ZN A7-3); Ø0.191 WAS 0.129 (ZN C8-5); REASON: SEE TR-D350-607-2 REV. B.	MB	10.07.05
A	NEW ISSUE	MB	10.06.18
REV.	DESCRIPTION	BY	DATE
DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO. D4148	REV. E SHEET 1 OF 5
MFG. APPR.	<i>[Signature]</i>	TITLE FWD X-TUBE LUG ASSY	SCALE NTS
APPROVED	<i>[Signature]</i>	COPYRIGHT © 2018 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS UNDERSTANDING THAT IT IS NOT TO BE RELEASED FOR ANY PURPOSE OR COPIED OR REPRODUCED TO ANY OTHER PERSON WITHOUT THE WRITTEN PERMISSION OF DART AEROSPACE LTD.	
DE APPR.	<i>[Signature]</i>	DATE 13.07.22	

8 7 6 5 4 3 2 1

D

C

B

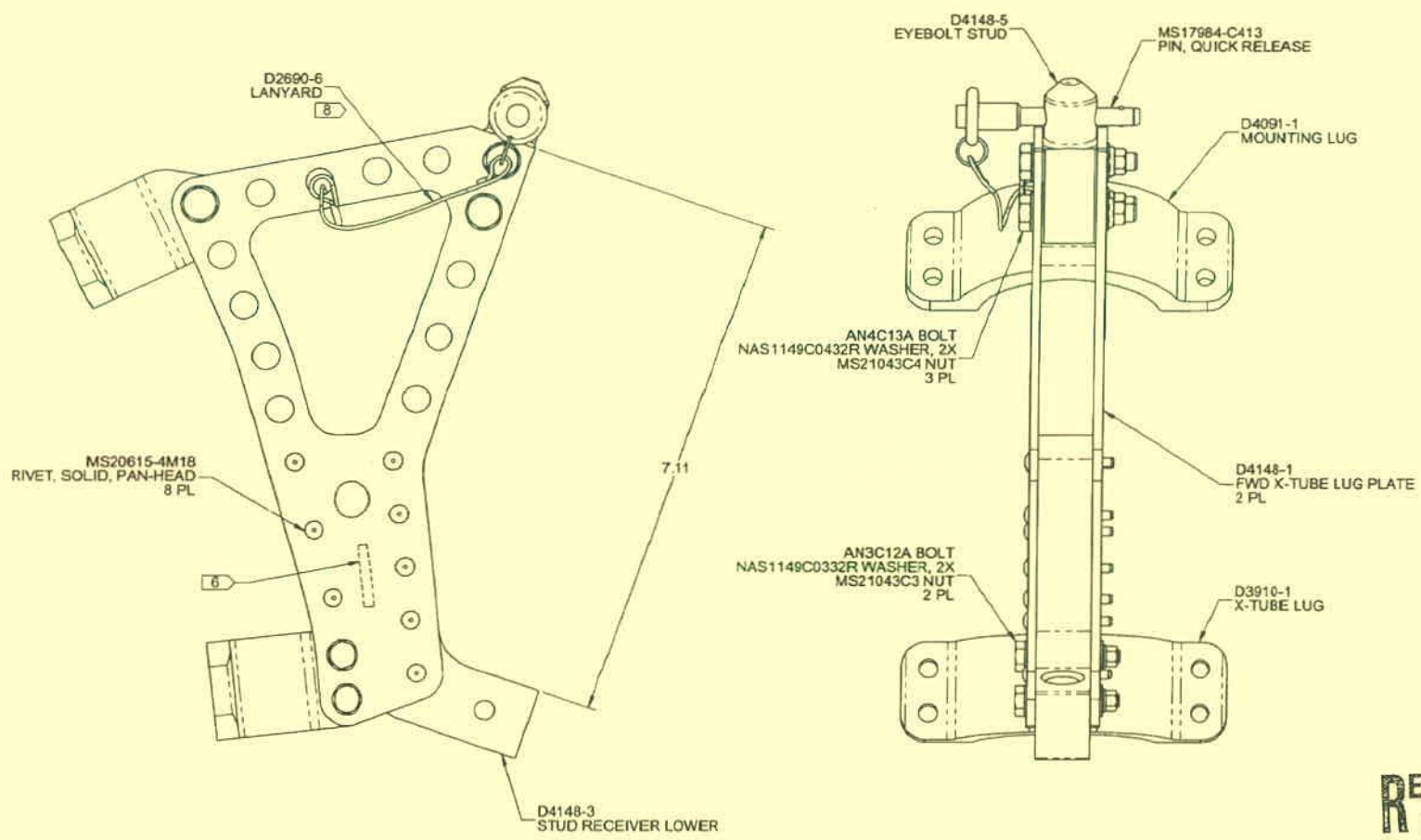
A

D

C

B

A

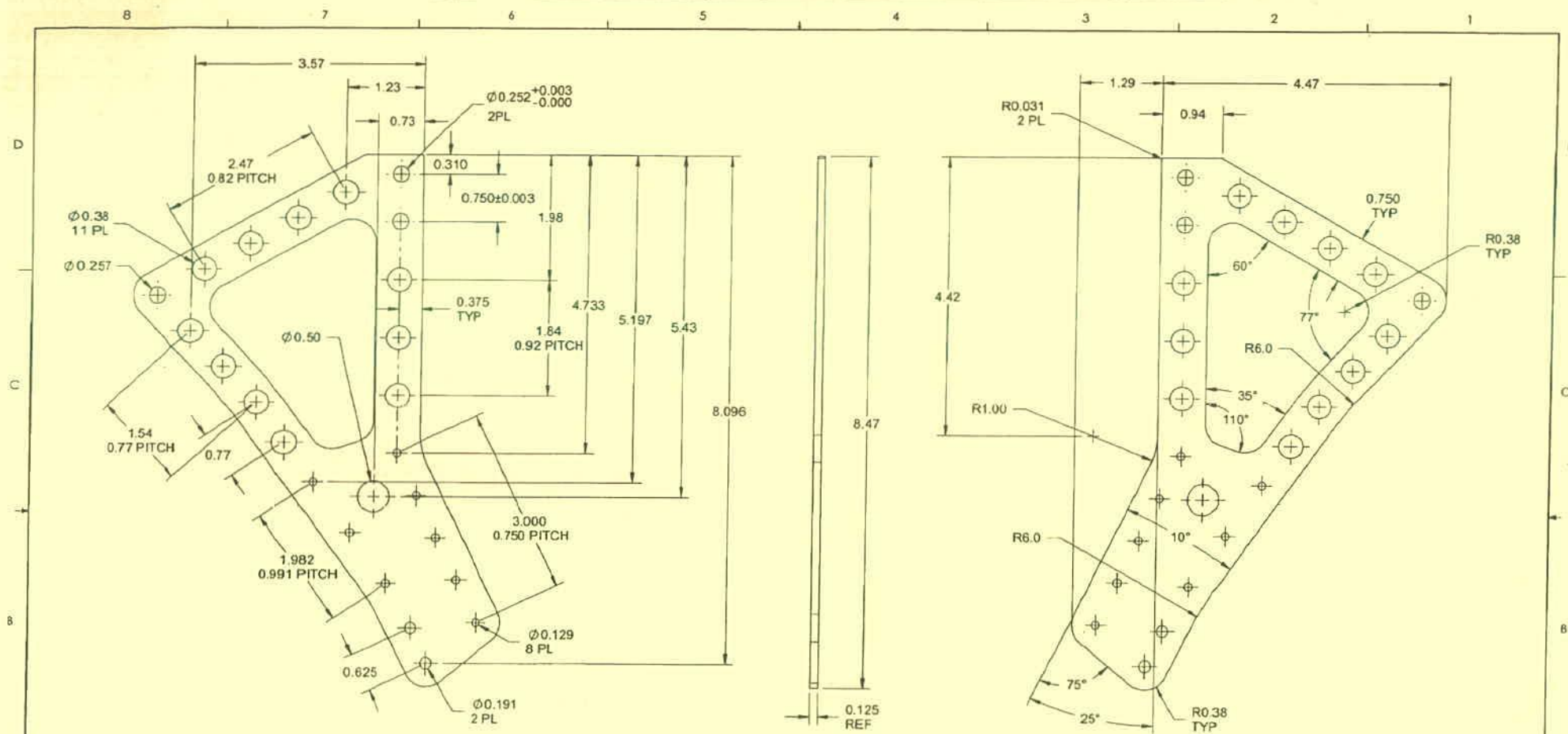


D4148-041 FWD X-TUBE LUG ASSY

RELEASED
2013-08-16
NP

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>NP</i>	DRAWING NO.	REV. E
MFG. APPR.	<i>NP</i>	D4148	SHEET 2 OF 5
APPROVED	<i>NP</i>	TITLE	SCALE
DE APPR.	<i>NP</i>	FWD X-TUBE LUG ASSY	NTS
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8 7 6 5 4 3 2 1



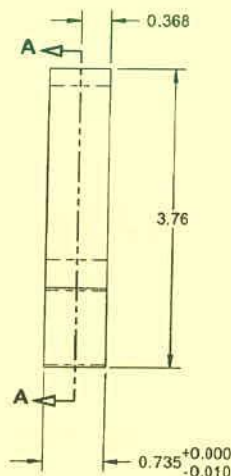
D4148-1 FWD X-TUBE LUG PLATE

NOTES:

- 1) MATERIAL: 303/304/316 STAINLESS STEEL 0.125" SHEET ANNEALED 2B FINISH, PER MIL-S-5059 OR AMS 5513/5524 OR ASTM A240 OR ASME SA240 REF DART SPEC M304S11GA OR M303S11GA
- 2) FINISH: NONE
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.52 lbs

RELEASED
2013-08-16

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4148	SHEET 3 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FWD X-TUBE LUG ASSY	NTS
DATE	13.07.22	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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Technical drawing of a mechanical part, likely a bracket or support, showing dimensions and tolerances. The part features a base plate with a central slot and a curved, reinforced section. Key dimensions include a base width of 4.65, a central slot width of 0.250, and a curved section with a radius of R6.0. The drawing includes various tolerances and material specifications like 0.06 X 45° CMF and R0.031 2 PL.

R0.38
TYP

RELEASED
2013-08-16

1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276
REF DART SPEC M304B OR M303B

2) FINISH: NONE

3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

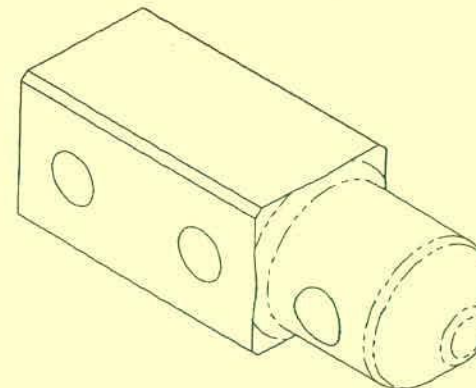
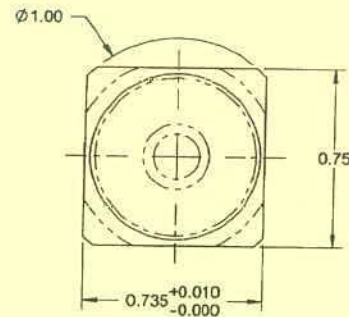
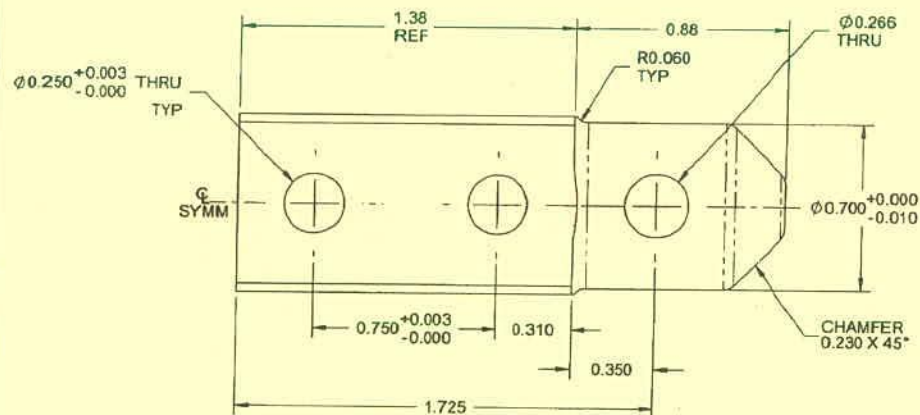
4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK: ALL SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: 1.51 lbs

DESIGN	MB	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED		DRAWING NO.	REV. E
MFG. APPR.		D4148	SHEET 4 OF 5
APPROVED		TITLE	SCALE
DE APPR.		FWD X-TUBE LUG ASSY	NTS
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D4148-5 EYEBOLT STUD

RELEASE
2013-08-16

- NOTES:**
 1) MATERIAL: 303/304/316 STAINLESS STEEL BAR PER ASTM A582 OR ASTM A276
 REF DART SPEC M304B OR M303B
 2) FINISH: NONE
 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK ALL SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: NONE
 7) WEIGHT: 0.27 lbs

DESIGN	MB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED		DRAWING NO. D4148	REV. E
MFG. APPR.		TITLE FWD X-TUBE LUG ASSY	SCALE NTS
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DATE	13.07.22		